

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
28 February 2002 (28.02.2002)

PCT

(10) International Publication Number
WO 02/16206 A1

(51) International Patent Classification⁷: **B65B 9/04**,
31/00, B65D 65/46

(21) International Application Number: PCT/GB01/03825

(22) International Filing Date: 23 August 2001 (23.08.2001)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0021112.8 25 August 2000 (25.08.2000) GB

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(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.



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(54) Title: WATER-SOLUBLE CONTAINERS

(57) Abstract: A process for producing an inflated, water-soluble container which comprises: a) forming an open container from a water-soluble film; b) at least partially filling the container with a composition which comprises a component which releases a gas; c) sealing the container; and d) allowing the container to inflate.

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CLAIMS

1. A process for producing an inflated, water-soluble container which comprises:
 - 5 a) forming an open container from a water-soluble film;
 - b) at least partially filling the container with a composition which comprises a component which releases a gas;
 - 10 c) sealing the container; and
 - d) allowing the container to inflate.
2. A process according to claim 1 wherein the container is at least partially filled with a composition and a
15 component which releases a gas is subsequently added.
3. A process according to claim 1 wherein the container is filled with a composition which comprises a component which releases a gas in a single step.
20
4. A process according to any one of the preceding claims wherein step (a) comprises thermoforming the film to produce a pocket.
- 25 5. A process according to claim 4 wherein step (c) comprises placing a second water-soluble film on top of the filled pocket and sealing the films together.
6. A process according to any one of the preceding
30 claims wherein the water-soluble film is a poly(vinyl alcohol) film.

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7. A process according to any one of the preceding claim
where the composition in step (b) is an aqueous or
non-aqueous liquid.
- 5
8. A process according to claim 7 wherein the aqueous
liquid contains greater than 8wt% water based on the
total weight of aqueous liquid and component which
releases a gas.
- 10
9. A process according to claim 7 or 8 wherein the
component which releases a gas comprises a mixture of
compounds which react in the presence of water to
produce the gas.
- 15
10. A process according to claim 7 or 8 wherein the
component which releases a gas comprises a compound
which reacts with a compound in the aqueous liquid
to produce the gas.
- 20
11. A process according to claim 10 wherein the component
which releases a gas is a bleach.
- 25
12. A process according to claim 7 or 8 where the
component which releases a gas is a component which
is a gas at room temperature (20°C) but which is
added in step (b) in the form of a cooled solid or
liquid.
- 30
13. A process according to any one of the preceding
claims wherein the gas which inflates the container

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is carbon dioxide.

14.A process according to any one of the preceding
claims wherein the container comprises a fabric care,
5 surface care or dishwashing composition.

15.A process according to any one of the preceding
claims wherein the container comprises a
dishwashing, water-softening, laundry or detergent
10 composition or a rinse aid.

16.A process according to claim 15 wherein the
container is suitable for use in a domestic washing
machine.
15

17.A process according to any one of claims 1 to 14
wherein the container comprises a disinfectant,
antibacterial or antiseptic composition.

20 18.A process according to any one of claims 1 to 14
wherein the container comprises a refill
composition for a trigger-type spray.

19.An inflated water-soluble container comprising a
25 water-soluble film enclosing a liquid or solid
composition and a gas, wherein the gas is enriched
with at least one gaseous component as compared
with air or comprises at least one gaseous
component not normally present in air.

30

20.A container according to claim 19 wherein the

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gaseous component is carbon dioxide.

21.A container according to claim 19 wherein the gaseous
component is oxygen or a chlorine containing
5 component.

22.A container according to any one of claims 19 to 21
wherein the water-soluble film is a poly(vinyl
alcohol) film.
10

23.A container according to any one of claims 19 to 22
wherein the water-soluble film has been
thermoformed to form a pocket and the pocket has
been sealed by placing a second water-soluble film
15 over the pocket and sealing the films together.

24.A container according to any one of claims 19 to 23
wherein the water-soluble film has been thermoformed.

20 25.A container according to any one of claims 19 to 24
wherein the composition is a fabric care, surface
care or dishwashing composition.

26.A container according to any one of claims 19 to 25
25 wherein the composition is a dishwashing, water-
softening, laundry or detergent composition or is a
rinse aid.

27.A container according to claim 26 which is suitable
30 for use in a domestic washing machine.

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28.A container according to any one of claims 19 to 25
wherein the composition is a disinfectant,
antibacterial or antiseptic composition.

29.A container according to any one of claims 19 to 25
5 wherein the composition is a refill composition for
a trigger-type spray.